

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of the Claims:**

1. (Original) A process for the detection of the radiation emitted by the various components in a sample of a fluid wherein the radiation emitted by activated molecules within the sample of the fluid is used to determine the nature of and quantities of materials present in the fluid.
  
2. (Original) A fluid analyser system comprising a receptacle(s) for the collection of a fluid sample and an analysis apparatus containing a consistent light condition compartment containing temperature detection device(s) into which the receptacle containing the fluid sample may be placed, means within the consistent light condition compartment for activating the molecules within the sample and means for detecting the radiation emitted by the sample, together with means for magnification of the detected signal.
  
3. (Original) A fluid analyser system according to Claim 2 comprising means for translating the magnified signal into the nature and quantity of the fluids present in the sample said means being referenced according to:

- a) the known volume of the inflated receptacle
- b) the light condition of the fluid sample
- c) the temperature of the fluid sample
- d) the duration of the radiation scan and/or
- e) the distance of the radiation scan.

4. (Original) A fluid analyser system comprising:

- i) A receptacle for a fluid sample.
- ii) A consistent light condition environment in which the receptacle can be placed.
- iii) A timing device for measuring duration of the scan of the radiation emitted by the fluid sample in the receptacle.
- iv) A temperature sensor for determining the temperature of the sample.
- v) Means for activating the molecules within the sample.
- vi) Detector(s) for receiving data from the radiation emitted by the sample located at a predetermined distance from the sample.
- vii) Means for translating and magnifying the signal from the detector(s) enabling identification of the intensities and the peak intensity values' wavelengths.

5. (Original) A fluid analyser system according to Claim 4 including a light meter for determining the consistent light condition environment.
6. (Currently amended) A fluid analyser system according to ~~any of Claims~~ Claim 2 to 5 in which the analyser system is non-invasive.
7. (Currently amended) A fluid analyser system according to ~~any of Claims~~ Claim 2 to 6 that and transmits and/or receives test data remotely.
8. (Currently amended) A fluid analyser system according to ~~any of Claims~~ Claim 2 to 7 including one or more of a visual display screen, a printer, a data transmitter/receiver, data storage, rechargeable/universal mains power supply, peripheral ports, keyboard, scroll bar, switches.
9. (Currently amended) A fluid analyser system according to ~~any of Claims~~ Claim 2 to 8 comprising a database of fluids and their known wavelengths.
10. (Canceled)
11. (Canceled)
12. (Currently amended) A fluid analyser system according to ~~any of Claims~~ Claim 2 to 11 which is portable.

13. (Currently amended) A fluid analyser system according to ~~any of the Claims~~ Claim 2 to 12 in which the walls of the receptacle have a high optical clarity and are flexible but not elastic.
14. (Currently amended) A fluid analyser according to ~~any of Claims~~ Claim 2 to 13 in which the receptacle is formed from a fluorocarbon polymer.
15. (Currently amended) A fluid analyser according to ~~any of Claims~~ Claim 2 to 13 in which the receptacle is formed from a medical grade polypropylene.
16. (Currently amended) A fluid analyser according to ~~any of Claims~~ Claim 2 to 15 in which the receptacle is provided with a one-way valve.
17. (Canceled)
18. (Currently amended) An analyser according to Claim 16 or ~~Claim 17~~ in which the valve is in a valve holder which is shaped so that a fluid delivery tube, can be attached to the top of the receptacle.

19. (Currently amended) A fluid analyser according to Claim 16 to ~~Claim 18~~ in which the valve is in a valve holder which is shaped so that another receptacle or attachment can be attached to the bottom of the receptacle.
20. (Currently amended) A fluid analyser according to ~~any of Claims~~ Claim 2 to ~~19~~ in which the shape of the inflated receptacle is such that it is a firm fit within the consistent light condition environment.
21. (Currently amended) A fluid analyser according to ~~any of Claims~~ Claim 2 to ~~20~~ containing means whereby the peak intensities and peak intensity values are used/calculated and/or correlated with known/unknown peak intensities and/or peak intensity values (nm wavelength values) to indicate the nature of the fluids present in the sample and to determine the concentrations of the fluids in the sample.
22. (Original) A process according to Claim 1 wherein the measurement of the radiation is magnified and the magnified signal used to identify the fluids present.
23. (Canceled)
24. (Canceled)

25. (Canceled)

26. (Currently amended) A process according to ~~any of Claims~~ Claim 1 and 22 to 25 in which multiple measurements are made of one or more samples and the result averaged.

27. (Currently amended) A process according to ~~any of Claims~~ Claim 1 and 22 to 26 in which at the time of analysis humidity is measured.

28. (Canceled)

29. (Canceled)

30. (Currently amended) A technique according to any of the preceding Claims wherein the A technique for the detection of the radiation emitted by the various components in a sample of a fluid wherein the radiation emitted by activated molecules within the sample of the fluid is used to determine the nature of and quantities of materials present in the fluid, and comprising a fluid analyser system having a receptacle(s) for the collection of a fluid sample and an analysis apparatus containing a consistent light condition compartment containing temperature detection device(s) into which the receptacle containing the fluid sample may be placed, means within the consistent light condition compartment for activating the

molecules within the sample and means for detecting the radiation emitted by the sample, together with means for magnification of the detected signal, and further comprising a device for activation of the molecules that provides a radio frequency discharge.

31. (Currently amended) A technique according to Claim 30 in which ~~the an~~ excitation device is located within the constant light condition compartment so that excitation takes place in a plane perpendicular to ~~the a~~ radiation absorption device(s).
32. (Currently amended) A technique according to Claim 30 or ~~Claim 31~~ wherein a metallic object is positioned at the extremity of the constant light condition compartment to direct the radio frequency.
33. (Currently amended) A technique according to ~~Claim 30 any of the preceding Claims~~ wherein the detector(s) is a radiation absorbance device(s).
34. (Canceled)
35. (Canceled)
36. (Canceled)

37. (Currently amended) A technique according to Claim 30 ~~any of the preceding Claims~~ wherein the sample may be taken at one location, the scanning and analysis system may be used in the same or another location and the detection signal, either via a remote control or operator, is transferred to another location for magnification, analysis and/or storage or kept in the same location for magnification, analysis and/or storage.
38. (Currently amended) Use of the techniques technique of the present invention Claim 30 for the detection of gases.
39. (Currently amended) Use of the techniques technique of the present invention Claim 30 for the quantification of gases.
40. (Currently amended) Use of the techniques technique of the present invention Claim 30 for the detection of fluids.
41. (Currently amended) Use of the techniques technique of the present invention Claim 30 for the quantification of fluids.
42. (Currently amended) Use of the techniques technique of the present invention Claim 30 in the evaluation of the emissions generated by engine combustion and their interaction with the environment.

43. (Currently amended) Use of the techniques technique of the present invention Claim 30 in the detection and/or quantification of the content of human and animal breath.

44. (Currently amended) Use of the techniques technique of the present invention Claim 30 in the evaluation of the content of human and animal breath.

45. (Currently amended) Use of the techniques technique of the present invention Claim 30 in the evaluation of the content of air and/or the environment.

46. (Canceled)

47. (Currently amended) Use of the techniques technique of the present invention Claim 30 to generate markers or signatures.

48. (Canceled)

49. (Canceled)

50. (Canceled)

51. (Currently amended) The use according to Claim 49 30 for personal identification.
52. (Canceled)
53. (Canceled)
54. (Currently amended) The use according to ~~any of Claims~~ Claim 38 to 53 in which the sample is taken and scanned in a first location and the results transmitted to a second location.
55. (Canceled)
56. (Canceled)
57. (Currently amended) The use according to ~~any of Claims~~ Claim 38 to 54 in an industrial environment for the detection of gases.
58. (Currently amended) The use according to ~~any of Claims~~ Claim 38 to 54 to determine blood type via a blood and/or breath sample.
59. (Canceled)

60. (Canceled)